UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



Mr. Bill Metzger Chemsico 8464 Chapin Industrial Drive St. Louis, MO 63114

nct - 8 1998

Dear Mr. Metzger:

Subject:

Efficacy Study Reviews, MRIDs 446179-00 & -01; 446352-01 & -02

Chemsico Insect Bait A

EPA Registration No. 9688-134

Your Submissions Dated August 3 and August 21, 1998

Review of the above referenced preliminary product performance studies has been completed. This submission represents the first progress report as a condition of registration. Conclusions and comments from those reviews are summarized below.

MRIDs 446179-00 & -01: Consumer Survey

- 1. The consumer survey needs to be expanded to other markets and the sample size must be increased to obtain results that are statistically significant and thereby a true representation of the consumer population purchasing this product.
- The survey showed that consumers could follow many the directions much of the time but it also showed that they could or would not purchase the proper size package to treat their structure.
- 3. The company needs to verify the validity of the consumer data by doing the following:

(a) inspect stake placement;

- (b) determine whether or not consumers have identified "critical areas" correctly; and
- (c) measure the square footage of the homes in the survey to see if consumers calculate it correctly.

4. To help consumers more accurately estimate the correct amount of product to purchase,

Chemisico should consider label changes that require consumers to base their purchase on the

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perimeter of their home, instead of square footage. Square footage is meaningless because other variables such as the number of floors, home design, etc., can determine square footage but are not essential to bait application at ten foot intervals. The perimeter is the more meaningful measurement and is directly related to application of the product.

MRID 446352-01: Efficacy in Yosemite, CA

The following modifications to the study protocol should be made:

- Use the ASTM scale for describing visual damage to wood. Determine the amount of bait consumed by weighing each bait every 30 days. Any percent calculations used for comparative purposes should be based on changes in bait weights.
- Monitor termite activity at all structures in the complex using wood stakes placed at ten
 foot intervals. This will provide untreated control data and reveal the nature and extent of
 termite feeding pressure and infestation in the entire study area.
- Employ a statistical test method to evaluate the data, whether it be ANOVA or a t-test.
 The experimental design should accommodate the assumptions for the statistical test used.

See also note No. 4 below which would apply to this study site as well.

MRID 446352-02: Efficacy Around Homes in Lowndes, GA

The following modifications to the protocol should be made:

- 1. Use the ASTM scale for describing visual damage to wood. Determine the amount of bait consumed by weighing each bait every 30 days. Any percent calculations used for comparative purposes should be based on changes in bait weights.
- 2. Monitor termite activity at a minimum of twelve untreated structures using wood stakes placed at ten foot intervals. This will provide untreated control data and reveal the nature and extent of termite feeding pressure and infestation in the entire study area. This type of data is currently not available and is invaluable to assessing the usefulness of termite baits as preventive treatments. It is most important to monitor activity on properties adjacent to the treated test plots since termite workers from resident termite colonies will forage in all directions.
- Employ a statistical test method to evaluate the data, whether it be ANOVA or a t-test.
 The experimental design should accommodate the assumptions for the statistical test used.
- 4. Termites should not be allowed to consume all of the bait at any bait station location. If they do, they will probably not return. Baits must be replaced when heavily damaged.

Copies of the reviews are enclosed for your reference. If you have questions regarding this letter, please contact John Leahy of my team at (703) 305-6703, or Kevin Sweeney, Efficacy Specialist, at (703) 305-5063.

Sincerely,

George T. LaRocca Product Manager 13 Insecticide Branch Registration Division (7505C)

Enclosure